

ATTACHMENT B

PENDING CLAIMS

202. A composition comprising:

a plasmid including an immunostimulatory nucleic acid sequence comprising AACGTT, wherein C is unmethylated, and an antigen in a pharmaceutically acceptable carrier, wherein the antigen is encoded in the plasmid.

203. The composition of claim 202, wherein the plasmid is pREP7 encoding an antigen.

204. A method of treating an allergy in a vertebrate, comprising administering to the vertebrate an effective amount of an immunostimulatory nucleic acid in a plasmid, said immunostimulatory nucleic acid comprising 5'CG3', wherein C is unmethylated, and an effective amount of an antigen which stimulates production of allergy-associated IgE antibodies in the vertebrate, wherein said antigen is encoded in the plasmid.

205. (Amended) A method for suppressing an allergic response to an antigen in a mammal susceptible to an allergic reaction to said antigen which stimulates production of allergy-associated IgE antibodies in the mammal, comprising parenterally administering to the mammal

(a) an effective amount of an immunostimulatory nucleic acid in a plasmid, said immunostimulatory nucleic acid comprising 5'CG3', wherein C is unmethylated, and

(b) an effective amount of the antigen provided as the antigen *per se* or as a polynucleotide encoding the antigen.

206. A pharmaceutical composition for stimulating an immune response to an antigen, comprising pREP7 encoding the antigen and a pharmaceutically acceptable carrier.

ATTACHMENT C

PROPOSED COUNTS

Proposed Count 1

A composition comprising:

a plasmid including an immunostimulatory nucleic acid sequence comprising AACGTT, wherein C is unmethylated, and an antigen in a pharmaceutically acceptable carrier, wherein the antigen is encoded in the plasmid

OR

A composition comprising:

a plasmid including an immunostimulatory nucleic acid sequence, comprising:

5'X₁X₂CGX₃X₄3' wherein C is unmethylated, wherein X₁, X₂, X₃, and X₄ are nucleotides and an antigen in a pharmaceutically acceptable carrier, wherein X₁X₂ are nucleotides selected from the group consisting of: GpT, GpG, GpA and ApA; and X₃X₄ are nucleotides selected from the group consisting of: TpT, CpT, GpT, and TpG.

Proposed Count 2

A method for suppressing an allergic response to an antigen in a mammal susceptible to an allergic reaction to said antigen which stimulates production of allergy-associated IgE antibodies in the mammal, comprising parenterally administering to the mammal

- (a) an effective amount of an immunostimulatory nucleic acid in a plasmid, said immunostimulatory nucleic acid comprising 5'CG3', wherein C is unmethylated, and
- (b) an effective amount of the antigen provided as the antigen *per se* or as a polynucleotide encoding the antigen

OR

A method for desensitizing a subject against the occurrence of an allergic reaction in response to contact with a particular allergen, comprising administering to the subject an effective amount of an immunostimulatory nucleic acid, comprising:



wherein the immunostimulatory nucleic acid includes at least 8 nucleotides and wherein C is unmethylated and wherein X_1 and X_2 are nucleotides and an effective amount of the allergen.